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Health, Education and Human Services Division

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June 2, 1997

The Honorable Fortney H. (Pete) Stark
House of Representatives

Subject: Medicare: Home Health Agencies With High Visit Rates Skew Averages

Dear Mr. Stark:

Medicare's expenditures for home health care have been rising rapidly, increasing an average of 33 percent per year since 1989. In a March 1996 report[1] we concluded that a combination of factors led to this high rate of growth, including changes in the definition of what is covered under the benefit and the shift from short-term, post-hospital care to more longer-term care for chronic conditions. We also reported that the number of Medicare-certified home health agencies (HHA) has seen rapid growth in recent years, increasing from 5,692 agencies at the end of 1989 to 10,133 agencies as of April 1997. The number of proprietary (for-profit) HHAs has accounted for 83 percent of this growth, with an increase from 2,007 (35 percent of all HHAs) to 5,699 (56 percent of HHAs). And, we found that proprietary agencies consistently provide more visits per beneficiary throughout the country than do voluntary and government agencies. For example, in 1993,[2] proprietary agencies provided an average of 78 visits per year per beneficiary while voluntary and government agencies provided an average of 46 visits.

The administration has proposed establishing a prospective payment system (PPS)[3] for home health care as a way of helping control cost growth, and the

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[1]Medicare: Home Health Utilization Expands While Program Controls Deteriorate (GAO/HEHS-96-16, Mar. 27, 1996).

[2]The most recent data available at the time of that report.

[3]A PPS establishes the amount that will be paid for care in advance of the period to which the rate applies. Generally, if the provider has costs below the payment rate, it keeps the difference as a profit. If costs are higher than

Congress is considering this and other proposals. You asked us whether, in preparing our March 1996 report, we had found any reasons why proprietary HHAs provide more visits than voluntary and governmental agencies. Additionally, you asked whether there is any justification for the extra visits and whether the skewing effect of the higher visit rates by proprietary agencies could be removed when calculating the number of visits for purposes of devising a PPS for home health.

To address these questions, we reviewed our prior work and other studies on home health utilization. We also did some additional analyses, using the episode of care data base for the 1996 report, to examine differences in utilization between proprietary and nonprofit HHAs. These data were extracted from the data bases maintained by the Health Care Financing Administration (HCFA), which is responsible for managing the Medicare program.

In summary, our work and the work of others has consistently shown that proprietary agencies provide more visits per beneficiary than agencies of other types. However, while an agency could provide more visits on average than other agencies for legitimate reasons, none of the factors we and others explored provided an explanation related to patient need for the differences in utilization among agency types. In developing a PPS, one way to lessen the influence on visit rates of HHAs that consistently furnish more visits is to use the median number of visits--the point at which half of patient cases (or episodes of care) have fewer visits and half have more--rather than using the average number of visits to determine payment rates for episodes of care. Using the median could be combined with an "outlier" payment system for exceptional cases that justifiably have high numbers of visits so that HHAs are not financially disadvantaged by patients who need extraordinary care.

We also have concerns about the adequacy of HCFA's current data on home health visit rates and costs for setting PPS rates. Our concern stems from the low levels of medical reviews and cost report audits conducted by Medicare's intermediaries during the 1990s. Thorough reviews and audits should be performed on a projectable sample of home health agencies and the results used to adjust HCFA's data bases before PPS rates are set.

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payments, the provider incurs a loss.

UTILIZATION PATTERNS OF PROPRIETARY HHAs

In our 1996 report we found that in 1993, home health patients receiving care from a proprietary HHA had a much higher average number of visits per year than those receiving care from government or voluntary agencies. We found no explanation for this difference in use rates either in our analysis or the literature. Our additional analysis of beneficiary episodes of care during 1992-93 for the top 15 diagnoses[4] also showed that proprietary agencies provided a higher number of visits per episode–an average of 43 visits with a median of 24 visits for proprietary agencies versus an average of 28 visits for nonprofit agencies (voluntary and government agencies combined) with a median of 15.[5] While the average number of visits per episode provided by proprietary HHAs compared to nonprofit agencies varied somewhat by HCFA region, table I shows that proprietary agencies clearly provided more visits in all regions during 1992-93.

Table 1: Average and Median Visits Per Care Episode–Top 15 Diagnoses, 1992-93

HCFA region	All HHAs		Proprietary		Nonprofit		Ratio[a]	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Boston	37.1	17	50 0	25	35.5	17	1 4	1.5
New York	26.0	15	33.8	19	25.4	14	1.3	1 4
Philadelphia	25.1	15	32.0	18	23.1	14	1 4	1.3
Atlanta	43.6	26	48.6	29	37.9	22	1.3	1.3
Chicago	27.4	16	35 7	21	24.8	14	1.4	1.5
Dallas	42.6	22	50.1	27	32.8	17	1.5	1.6
Kansas City	26.6	15	33.6	20	24.7	14	1.4	1 4
Denver	32.4	17	48.0	24	27 6	15	1 7	1.6
San Francisco	24.5	14	31.7	17	20.3	12	1.6	1.4
Seattle	23.6	13	32 4	17	21 7	13	1.5	1.3
All	33 1	18	43.3	24	28 0	15	1.6	1.6

[4]Approximately half of all home health beneficiaries have 1 of these 15 diagnoses.

[5]These numbers are lower than those for visits per beneficiary per year, as a beneficiary may have more than one episode in a year.

[a] Proprietary to nonprofit.

Source: GAO analysis of data from the Medicare Standard Analytical File: Home Health Claims History Database.

An HHA may provide more visits on average than another for legitimate reasons. For example, one study found that regional variation in utilization could be explained, in part, by patient characteristics.[6] Beneficiaries in the East South Central Census region, for instance, were more likely to live in poverty and be in poorer health than beneficiaries in other parts of the country, and these characteristics are associated with higher than average home health use. However, this does not explain why one type of agency would provide more visits than another type in the same geographic area. A multivariate model of visits rendered per episode indicated that a proprietary status of an HHA is a highly significant predictor of utilization and that proprietary agencies provided an average of 30 percent more visits per episode than did nonprofit agencies, regardless of region.

Further, in our work, we found that within the same state or region, proprietary agencies provided more visits for beneficiaries with the same primary diagnosis. For example, home health patients with a primary diagnosis of diabetes received an average of 53 visits from proprietary agencies compared with an average of 30 visits from nonprofit agencies during episodes occurring in 1992-93. Tables 2 through 5 show comparisons of mean and median home health visits for four diagnoses in the 10 HCFA regions during 1992-93. These tables show that although visit rates varied among the HCFA regions, proprietary agencies consistently furnished more visits for each of the diagnoses in every region of the country.

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[6] Jennifer Schore, Patient, Agency, and Area Characteristics Associated with Regional Variation in the Use of Medicare Home Health Services, prepared by Mathematica Policy Research, Inc., for HCFA, Contract No. HCFA-500-89-0047, Sept. 30, 1994. This study looked at reasons for regional variations in home health utilization using home health episodes starting in 1990, 1991, and 1992.

Table 2: Average and Median Visits Per Episode for Diabetes by HCFA Region, 1992-93

HCFA region	Proprietary		Nonprofit		Ratio	
	Mean	Median	Mean	Median	Mean	Median
Boston	54.5	24	35.3	17	1.5	1.4
New York	38.2	18	24.2	13	1.6	1.4
Philadelphia	36.2	18	23.4	14	1.6	1.3
Atlanta	56.6	30	41.3	22	1.4	1.4
Chicago	42.3	22	26.4	15	1.6	1.5
Dallas	61.4	29	38.6	18	1.6	1.6
Kansas City	39.4	21	26.3	14	1.5	1.5
Denver	61.5	25	32.1	17	1.9	1.5
San Francisco	44.2	20	23.8	13	1.9	1.5
Seattle	42.6	20	24.7	15	1.7	1.3
All	52.6	26	30.2	16	1.7	1.6

Source: GAO analysis of data from the Medicare Standard Analytical File: Home Health Claims History Database.

Table 3: Average and Median Visits Per Episode for Hypertension by HCFA Region, 1992-93

HCFA region	Proprietary		Nonprofit		Ratio	
	Mean	Median	Mean	Median	Mean	Median
Boston	48.9	24	29.6	14	1.7	1.7
New York	27.2	17	19.3	12	1.4	1.4
Philadelphia	30.5	17	18.5	12	1.7	1.4
Atlanta	48.8	29	40.4	26	1.2	1.1
Chicago	32.8	20	22.3	13	1.5	1.5
Dallas	47.3	27	31.4	17	1.5	1.6
Kansas City	29.6	18	21.1	12	1.4	1.5
Denver	47.5	24	22.3	13	2.1	1.9
San Francisco	31.3	18	17.6	11	1.8	1.6
Seattle	30.5	16	20.9	12	1.5	1.3
All	44.0	25	27.5	15	1.6	1.7

Source: GAO analysis of data from the Medicare Standard Analytical File: Home Health Claims History Database.

Table 4: Average and Median Visits Per Episode for Heart Failure by HCFA Region, 1992-93

HCFA region	Proprietary		Nonprofit		Ratio	
	Mean	Median	Mean	Median	Mean	Median
Boston	52.3	26	36.2	17	1.5	1.5
New York	29.8	17	21.4	12	1.4	1.4
Philadelphia	33.0	19	22.9	14	1.4	1.4
Atlanta	50.2	31	39.3	23	1.3	1.4
Chicago	35.2	20	24.4	14	1.4	1.4
Dallas	49.8	28	33.0	18	1.5	1.6
Kansas City	33.3	20	24.5	14	1.4	1.4
Denver	49.3	25	28.7	15	1.7	1.7
San Francisco	28.8	17	19.3	12	1.5	1.4
Seattle	35.7	18	22.8	13	1.6	1.4
All	43.4	25	27.2	15	1.6	1.7

Source: GAO analysis of data from the Medicare Standard Analytical File: Home Health Claims History Database.

Table 5: Average and Median Visits Per Episode for Hip Fracture by HCFA Region, 1992-93

HCFA region	Proprietary		Nonprofit		Ratio	
	Mean	Median	Mean	Median	Mean	Median
Boston	47.7	30	38.4	23	1.2	1.3
New York	35.6	25	30.0	22	1.2	1.1
Philadelphia	26.4	17	22.7	16	1.2	1.1
Atlanta	39.3	29	30.5	21	1.3	1.4
Chicago	32.5	22	23.7	16	1.4	1.4
Dallas	38.7	27	26.2	18	1.5	1.5
Kansas City	36.3	26	25.6	18	1.4	1.4
Denver	42.9	29	28.2	20	1.5	1.5
San Francisco	26.6	20	18.9	14	1.4	1.4
Seattle	27.1	17	19.5	14	1.4	1.2
All	35.3	25	26.8	18	1.3	1.4

Source: GAO analysis of data from the Medicare Standard Analytical File: Home Health Claims History Database.

The Department of Health and Human Services' Office of the Inspector General (OIG), has also examined differences in visit rates by type of agency. A 1997 OIG study[7] looked at the operating practices of low average utilization and high average utilization HHAs by surveying a random sample of 150 of each of these two types of agencies. OIG found that HHAs at the high utilization end tended to be for-profit and freestanding organizations. OIG found, however, that program operations were similar in high- and low-utilization agencies and did not explain the variation. For example, both types of agencies provided a similar mix of skilled nursing, physical therapy, occupational therapy, speech therapy, medical social services, and aide services. Additionally, OIG did not find any difference between the two types of agencies in terms of beneficiary age, race, gender, deaths while in care, qualifying conditions, and principal diagnostic codes. OIG also did not find any differences in the quality of care provided as measured by the number of deficiencies and complaints recorded by HCFA's survey and certification program for HHAs or by their accreditation status. OIG concluded that nothing in its findings would suggest that beneficiaries in the high-utilization, proprietary agency-dominated group were any sicker or in any greater need of services than those beneficiaries in the lower-utilization groups.

Another study[8] also found a marked difference in the amount of care provided by proprietary and nonprofit home health agencies. Even after controlling for the health and functional status of the beneficiary, as well as age, sex, and living situation, those beneficiaries getting care from a nonprofit agency received, on average, 21 fewer visits than those receiving care from a for-profit one.

CONSIDERATIONS IN DESIGNING A PPS FOR MEDICARE HOME HEALTH

Cost-based reimbursement for home health has been criticized by health financing experts as providing few incentives for controlling volume of services, operating efficiently, or controlling costs. It is cited as one of the reasons for the significant growth in home health spending since 1989. However, the growth in cost per visit has been relatively modest during the

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[7]Office of the Inspector General, Operating Practices of High-Cost and Low-Cost Home Health Agencies, OEI-04-93-00261 (Washington, D.C.: HHS, Feb. 1997).

[8]Elizabeth Mauser, Does Organizational Form Matter: Implications for the Home Health Care Industry, paper presented at the American Public Health Association Meeting, San Diego, CA, Oct. 30-Nov. 2, 1995.

1990s, averaging 3.6 percent per year. As we have noted, expenditure growth has resulted from an increasing volume of services covered under the program –both in terms of increases in the numbers of users and in the number of covered visits per user.

The administration has recently proposed moving home health payments from cost reimbursement to a PPS, beginning in 1999. The goal in designing a PPS is to ensure that providers have incentives to control costs and that, at the same time, payments are adequate for efficient providers to furnish needed services and at least recover their costs. If payments are set too high, for example, Medicare will not save money and cost-control incentives can be weak.

As we mentioned in our recent testimony to the Subcommittee on Health of the House Ways and Means Committee,[9] we are concerned that the unit of service selected for such a system should not lead to increased costs or lower quality of care. A per visit PPS would give agencies incentives not only to hold down the cost per visit but also to maximize the number of visits and could result in higher overall Medicare costs. For this reason, a per episode PPS may be attractive, but there are also potential problems with this choice. For example, agencies could gain by increasing their caseloads or by reducing the number of visits provided during an episode, thus potentially lowering the quality of care. If an episode of care is chosen as the unit of service, HCFA would need a method to ensure that beneficiaries receive adequate services and that any reduction in services that can be accounted for by past overprovision of care will not result in windfall profits for agencies.

We also have concerns about the appropriateness of using current data on visit rates to determine payments under a PPS for episodes of care. As we reported in March 1996, controls over the use of home health care are virtually nonexistent. Operation Restore Trust, a joint effort by federal and state agencies in several states to identify fraud and abuse in Medicare and Medicaid, also found very high rates of noncompliance with Medicare's coverage conditions in targeted agencies. Audits found that from 19 to 64 percent of home health visits paid for by Medicare did not meet Medicare guidelines for reasons such as the patients were not homebound, visits were not medically necessary, and visits were not provided. Because these audits were done at agencies suspected of having problems, the results are not projectable to all

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[9]Medicare Post-Acute Care: Home Health and Skilled Nursing Facility Cost Growth and Proposals for Prospective Payment (GAO/T-HEHS-97-90, Mar. 4, 1997).

HHAs. Nevertheless, this project's results and the fact that intermediaries do only a very small number of on-site compliance audits each year[10] indicate that substantial amounts of noncovered care are likely to be reflected in HCFA's home heath care utilization data. For these reasons, we suggested that HCFA conduct thorough on-site medical reviews of a projectable sample of HHAs to give it a basis to adjust utilization rates for purposes of establishing a PPS.

Additionally, in our March 1997 testimony, we discussed concerns about the quality of HCFA's home health care cost data for PPS rate-setting purposes. Because only a relatively small portion of HHAs have had on-site cost report audits performed by the intermediaries, there is little assurance that reported costs are reasonable and/or related to patient care. Further, an examination of caregiver compensation in 1995 as a proportion of the Medicare cost limits indicated that there was considerable opportunity to inflate overhead expenses (see table 6). The average caregiver compensation per visit ranged from a high of 49 percent of the Medicare cost limits for physical therapy services to less than 26 percent of the cost limits for home health aide services. Because of our concerns about HCFA's home health cost data bases, we suggested that HCFA conduct audits of a projectable sample of cost reports to help ensure that inflated costs are not used as the base for PPS rate setting.

[10]Our 1996 report found that only a fraction of 1 percent of Medicare-certified HHAs received an on-site comprehensive medical review in 1994 and that without on-site reviews, it was unlikely that visits not meeting Medicare requirements would be identified.

Table 6: Home Health Caregiver Compensation as a Proportion of Medicare Cost Limits, 1995

	Per visit compensation, by percentile			Per visit cost limits		Ratio of median compensation to cost limit	
Type of visit	25th	Median	75th	Urban	Rural	Urban	Rural
Skilled nursing	$25.00	$26.93	$31.80	$91.16	$99.83	29.54%	26.98%
Occupational therapy	40.00	44.00	47.42	91.75	107.02	47.96%	41.11%
Physical therapy	40.00	45.00	49.00	91.80	105 55	49.02%	42 63%
Speech/language	39.20	44.00	47.22	93.18	110 45	47.22%	39.84%
Medical social work	36.85	42 00	47.09	129.62	164.60	32.40%	25.52%
Home health aide	11 00	11.75	13.74	45.98	46.30	25.55%	25.38%

Source: GAO analysis of data from National Association for Home Care, Basic Statistics About Home Care 1996, and Schedule of Limits on Home Health Agency Costs Per Visit, 60 FR 8389 (Washington, D.C.: Feb. 14, 1995).

USE OF MEDIAN NUMBER OF VISITS WOULD HELP REMOVE SKEWING EFFECT

The distribution of number of visits for home health care is skewed because of the episodes of care with high volumes of visits. This, in turn, has the effect of increasing the mean (average) number of visits per episode of care. One way to statistically address skewing is to use the median number of visits, the point where half of the cases have fewer and half have more visits. For example, while the mean number of visits per case for episodes of care for the top 15 diagnoses in 1992-93 was 33, the median was 18. Thus, using the median to establish PPS rates would provide greater incentives to control visit volume than would use of the mean.

Regardless of the measure of visits used to establish a per episode PPS, it would also be appropriate to provide for an outlier payment mechanism. Outlier payments could be made for cases where the number of visits significantly exceed the median (or whatever is used to establish payment rates) and the excess visits are demonstrated to be medically appropriate. This would help overcome the incentive to refuse to take cases that may require higher than normal numbers of visits. Another potential problem with a per

episode PPS is that it gives agencies incentives to increase caseload. A review mechanism would also be needed to help ensure that the patients treated by HHAs actually qualify for the benefit. Finally, a per episode PPS could result in HHAs' underserving patients because of the incentive to hold down the number of visits furnished. A quality of care monitoring process would be needed to help prevent this effect.

When faced with similar utilization and quality concerns about Medicare's proposed inpatient hospital PPS, the Congress directed the utilization and quality control peer review organizations to assess the necessity of admissions and quality of care of PPS hospital cases.

AGENCY COMMENTS

We discussed the contents of this letter with HCFA officials and reflected their comments where appropriate.

We are sending copies of this correspondence to the Administrator of HCFA and interested congressional committees. We will make copies available to others on request.

Should you or your staff have any questions, please call me at (202) 512-7114, or Tom Dowdal, Senior Assistant Director, at (202) 512-6588. Tricia Davis and Robert DeRoy also contributed to this letter.

Sincerely yours,

William J. Scanlon

William J. Scanlon
Director, Health Financing and Systems Issues

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